

ABSTRACT.

The present invention relates to a process for the synthesis of oxandrolone from mestanolone. The process comprises the steps of: (a) oxidizing mestanolone to form 17 β -hydroxy-17 α -methyl-5 α -androst-1-en-3-one; (b) hydroxylating the 17 β -hydroxy-17 α -methyl-5 α -androst-1-en-3-one to form 1 α , 2 α , 17 β -trihydroxy-17 α -methylandrostan-3-one; (c) cleaving the 1 α , 2 α , 17 β -trihydroxy-17 α -methylandrostan-3-one to form 17 β -hydroxy-17 α -methyl-1-oxo-1,2,-seco-A-nor-5 α -androstan-2-oic acid; and (d) reducing the 17 β -hydroxy-17 α -methyl-1-oxo-1,2,-seco-A-nor-5 α -androstan-2-oic acid to form oxandrolone.